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Old favourite in a new guise

ProLeiT AG showcases its latest Plant iT system generation at drinktec 2013

Sporting a revised user interface with a standard layout, new tools and more functions than ever before – the ninth generation of the proven process control system Plant iT from ProLeiT AG is a major leap in technology.

ProLeiT AG will present the ninth version of its tried-and-tested process control system Plant iT at drinktec 2013 - the world's largest trade fair for the beverage and liquid food industry - taking place in Munich, Germany, from 16th to 20th September. With more than 20 years of reliable service to its credit, the in-house developed control system from ProLeiT AG is the ideal solution for the integrated process automation of dairy and cheese-making facilities. Today, it is used effectively by numerous global clients, such as Almarai, Danone, Bauer, Müller, NÖM, Friesland Campina, Tara and Wimm-Bill-Dann, to name just a few.

In contrast to its predecessors, which were basically technical enhancements of existing models, the V9 has been designed with true user friendliness in mind. "We have thus responded to customer demands for control systems that offer greater ease of use. The goal is to ensure that customers can work with our process control systems in the most flexible manner possible," says Manfred Czepl, COO of ProLeiT AG. "Other systems seem to have deficiencies in this respect. The V9 developers therefore looked at ways to enhance user friendliness instead of trying to offer as many functions as possible. This was placed somewhat on the back-burner in recent years," explains Czepl. After roughly three years of development, the result is a fully revised user interface that boasts a standard layout and guides users through the individual menus with ease. Working in collaboration with external design agencies, the ProLeiT developers, who underwent specific training in usability and UX design at the Fraunhofer Institute for Applied Technology, managed to create an innovative user interface which complies with the latest guidelines on quality standards and good practice. This obviously incorporates all the user benefits normally considered with multi-touch display technology. The familiar "swipe functionality" from Windows 8 is also supported. Furthermore, users can now create and save individual "dashboards" tailored to their specific needs; and process images can be simply dragged and dropped into other screens.

The new Operation Manager – one interface for all your needs

Displays according to precise process areas and MES functions, editable menus as well as numerous new editing functions are the key features of the brand new Operation Manager the central user interface of Plant iT. This intuitively designed application is not only available for the standard process control system Plant Direct iT, but also for all other basic systems, modules and add-ons of the Plant iT system range. Operators can therefore carry out various processes using just one central application that boasts a familiar user interface design. Manfred Czepl says: "We believe this solution is unique in the market." All this has been achieved by scaling down the technology, including the development of an inhouse Process Screen Designer that replaces the previously used Visual Basic from Microsoft. This Screen Designer allows users to enjoy much more freedom than in the past. Thanks to vector-based graphic formats, the screen resolutions are freely scalable and offer the highest optical quality for high-resolution process images. "Technically speaking, this was



extremely difficult to realise with previous versions due to the application of bitmap formats. Moreover, the entire system is now more homogeneous, as we no longer have to ensure that our software elements comply with purchased ones," declares Czepl.

New features to match the new design

ProLeiT AG has also remembered to focus on the functional aspects of the process control system. For instance, a novel auto-tuning function has been integrated to allow the automatic calculation and optimisation of the PID parameters of a PID controller. This helps to save precious time during commissioning and provides a significant increase

> "The goal is to ensure that our customers can work with our process control systems in the most flexible manner possible. The V9 is therefore probably the most state-of-the-art control system with integrated MES functions" Manfred Czepl, COO.

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The screens and the layout of the new dashboard can be freely configured and saved by each user. This ensures an excellent overview even for complex processes.

in quality when compared to manually set controllers, i. e. parameters do not need to be specified, as the PID controller is optimised automatically. Another fresh element is the new basic system Plant Integrate iT, which extends the MES functionality of the standard process control system. This is an MES level reporting system that is separate from the actual production server and which can consolidate historical data of a Plant iT server and various external systems in a central database and function as an MES reporting system for industrial plants. Various types of reports can now also be displayed via a web browser. "This is our response to the increasing importance of MES for our customers," says Czepl.

A third, central element of the V9 is the new integrated Process Screen Designer, which includes a large number of industry-specific graphic objects that can be simply added via drag & drop. Last, but definitely not least, the connection between run-time systems and engineering systems has also been improved: the Process Screen Designer is available on each PC with a run-time system. "This means that the Operation Manager (user application), the Configuration Manager (engineering environment) and the Process Screen Designer are now installed on just one workstation. This provides operators and service staff with numerous advantages, as process images can be adapted directly at the workstation without having to additionally start external applications," explains Czepl. Nonetheless, the entire Plant iT architecture still operates on industrial PCs. The wide range of system languages available for the control system is also remarkable: besides German and English, language packages for Russian, French, Spanish, Portuguese and Chinese are currently available.

Flexible licence model

In view of the impressive innovations developed for the V9, it is important to consider whether the investment costs will actually produce a return. Manfred Czepl gives a reassuring answer to this question: "Even though the V9 is a completely revised version, the increase in price is very reasonable. Our long-term customers know that we only raise our prices when it is absolutely necessary in order to offer real value added." The licence system of ProLeiT AG is therefore extremely flexible and ranges from inexpensive compact licences (for up to two workstations without servers) to multi-server licences covering all project requirements. The number of automation objects to be controlled (e. g. motors, valves, flaps, measuring points, etc.) as well as the number of PLCs and clients (workstations) play a key role in the pricing process.

"We never count individual tags, but view, for example, a double-seated valve as a single object. A mediumsized dairy, for instance, with 1,500 automation objects, one server, one PLC, three workstations and the basic system Plant Liqu iT for recipe-controlled production processes would have to invest roughly €30,000 in licences," explains Czepl. The new Version 9 has already proved successful in pilot projects at various companies - also in the dairy industry. The full release of the V9 will take place at drinktec 2013 in Munich, where it will be on show for all to see at ProLeiT AG's stand (hall A4, stand 326).



Intuitive user guidance: The latest version of the process control system from ProLeiT AG is devoted to clarity and ease of use.